



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

November 23, 2011

Dear Superintendent:

Reducing energy use and protecting the health of students, teachers, and school staff from potential risks posed by polychlorinated biphenyls (PCBs) are of paramount importance to the U.S. Environmental Protection Agency (EPA). EPA encourages you to evaluate the current inventory of installed lighting fixtures in the school buildings in your district and determine if they contain PCBs. If they do contain PCBs, EPA recommends that you replace the PCB containing lighting fixtures with modern energy efficient units. This is an opportunity for your school district to invest in energy efficiency and over time save money.

PCBs are classified as suspected carcinogens. PCBs have been demonstrated to cause a variety of adverse health effects, including cancer in animals, and can damage the immune, reproductive, nervous, and endocrine systems. The different health effects of PCBs may also be interrelated. Effects on children and pregnant women are the greatest concern.

In 1979, the manufacture and importation of PCBs were banned in the United States. However, people can still be exposed to PCBs from older electrical equipment in use for 30 years or more.

Old fluorescent lighting fixture ballasts, high intensity discharge (HID) lighting ballasts and old electrical equipment devices may contain PCBs if they were installed in your school buildings before 1979. When these electric devices get hot during operation, small amounts of PCBs may get into the air and raise the level of PCBs in indoor air. Devices that contain PCBs can leak with age and leakage can be a source of exposure to PCBs. Most PCB containing lighting ballasts are in fixtures that use T-12 fluorescent lamps. The Energy Independence and Security Act of 2007 set efficiency standards for lighting, which will virtually eliminate the availability of all T-12 lamps by June 30, 2012 because they are so inefficient. This means that your school will no longer be able to replace T-12 light fixtures after June 30, 2012 because they will no longer be sold.

Over the past year, several New York City schools were sampled under a pilot program to determine the potential extent of PCB contamination in public schools. All five of the schools sampled were found to have varying levels of PCB contamination and action was taken to remove and replace the contaminated material. Air monitoring in classrooms also determined that PCBs were present at levels above EPA guidelines. EPA undertook a series of inspections at additional schools and found numerous PCB containing lighting ballasts that were leaking or had leaked in the past, a violation of the Toxic Substances Control Act (TSCA). Additional information on sampling for PCBs in New York City schools can be found online at: <http://www.epa.gov/region2/pcbs/index.html>.

If lighting fixtures and other products were manufactured prior to 1979, they should be assumed to be PCB containing and must be properly disposed of as a hazardous material. If leaking PCB containing equipment is found in a building, federal law requires that steps be taken to decrease any potential exposure and to remove and dispose of the PCBs in accordance with the law. PCBs should be removed by trained professionals using protective equipment and follow proper disposal procedures. A threshold of 50 parts per million (ppm) of PCB concentration is used to determine the proper disposal method for PCB waste. Many of the samples collected from leaking ballasts in New York City schools were above the 50 ppm level.

Numerous school buildings across the state have undergone lighting retrofits since 1979 in an effort to conserve energy and PCB containing light fixtures may have been removed as a result. Those facilities may no longer have PCBs in electrical lighting components in the school, but this should be verified. On June 1, 2011, the New Jersey Department of Education issued a letter to Chief School Administrators and School Business Administrators concerning PCB containing lighting fixtures. That letter is available online at: <http://education.state.nj.us/broadcasts/2011/JUN/01/3008/PCB%20Lights.pdf>.

As we have recently seen through our inspections at schools, old lighting ballasts represent a potentially significant source of PCBs within schools. By removing fixtures that contain PCBs, school districts will not only prevent potential exposure to PCBs, but also can significantly improve energy efficiency at schools, save on electricity bills, and reduce green house gas emissions. EPA has released written guidance recommending that schools take steps to reduce potential exposure to PCBs from older fluorescent lighting fixtures. Please read the guidance document online at: <http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/ballasts.htm>. EPA stands ready to provide outreach and technical assistance to help your school district address the PCB issue.

There is a wide range of resources available to assist school systems in reducing exposure to PCBs in light fixtures and other electrical equipment while saving energy and money. They include financial support and incentives for energy efficiency projects, as well as technical assistance and guidance. A list of resources available in New Jersey is enclosed.

If a school does not have the budget to pay for upgrades, financing can offer an attractive solution by structuring monthly financing payments to be lower than the energy cost saving realized. The financing costs (primarily interest) are typically less than the cost of paying for another year of wasted energy. Common financing options include:

- a) Tax-exempt lease purchase agreements (TELPs) with a lender or leasing company
www.energystar.gov/ia/business/COO-CFO_Paper_final.pdf.
- b) Subsidized utility, state, or other loan programs (visit www.dsireusa.org for more information)
- c) Financing introduced by an Energy Services Company (ESCO)

EPA encourages you to learn more about the risks of PCBs in school buildings and to take advantage of the opportunities to protect the health of students, teachers, and school staff while you save energy. Should you have any questions concerning this matter, please contact Mr. Henry Mazzucca, P.E., of EPA at mazzucca.henry@epa.gov or (732) 321-6768.

Thank you for your attention to this important matter.

Sincerely,


Judith A. Enck
Regional Administrator

Enclosure

Resources

In New Jersey State there is funding to support energy efficiency projects such as a light retrofit opportunity. Below is the contact from the New Jersey SmartStart Buildings programs:

- NJ SmartStart Buildings - <http://www.njcleanenergy.com/commercial-industrial/programs/nj-smartstart-buildings/nj-smartstart-buildings>
- Pay For Performance - <http://www.njcleanenergy.com/commercial-industrial/programs/pay-performance>

Sustainable New Jersey is a certification program for municipalities in New Jersey that want to go green, save money, and take steps to sustain their quality of life over the long term.

Sustainable Jersey: <http://www.sustainablejersey.com/>

- Identifies concrete actions that municipalities can implement to become "certified" and be considered leaders on the path to a sustainable community
- Provides clear "how to" guidance and tools to enable communities to make progress on each action
- Provides access to grants, and identifies existing and new funding opportunities for municipalities to make progress toward the actions
- Encompasses the 3 equal, interrelated components of sustainability:

There are also incentives and rebates available from utility electricity provider.

PSE&G - Non-Residential Efficiency Program – <http://www.doe.gov/savings/pseg-non-residential-efficiency-program>

In addition, there are guides for schools on energy efficiency from the Federal government from U.S. Department of Energy and the Environmental Protection Agency can be found at:

- ENERGY STAR Building Upgrade Manual - http://www.energystar.gov/ia/business/EPA_BUM_Full.pdf
- Energy Efficiency Programs in K-12 Schools - http://www.epa.gov/statelocalclimate/documents/pdf/k-12_guide.pdf

Guide to Operating and Maintaining EnergySmart Schools -

http://apps1.eere.energy.gov/buildings/publications/pdfs/energysmartschools/ess_o-and-m-guide.pdf
and - http://www1.eere.energy.gov/buildings/energysmartschools/financing_guide.html